

## **Historic, archived document**

Do not assume content reflects current scientific knowledge, policies, or practices.



1.1  
276647  
reserve

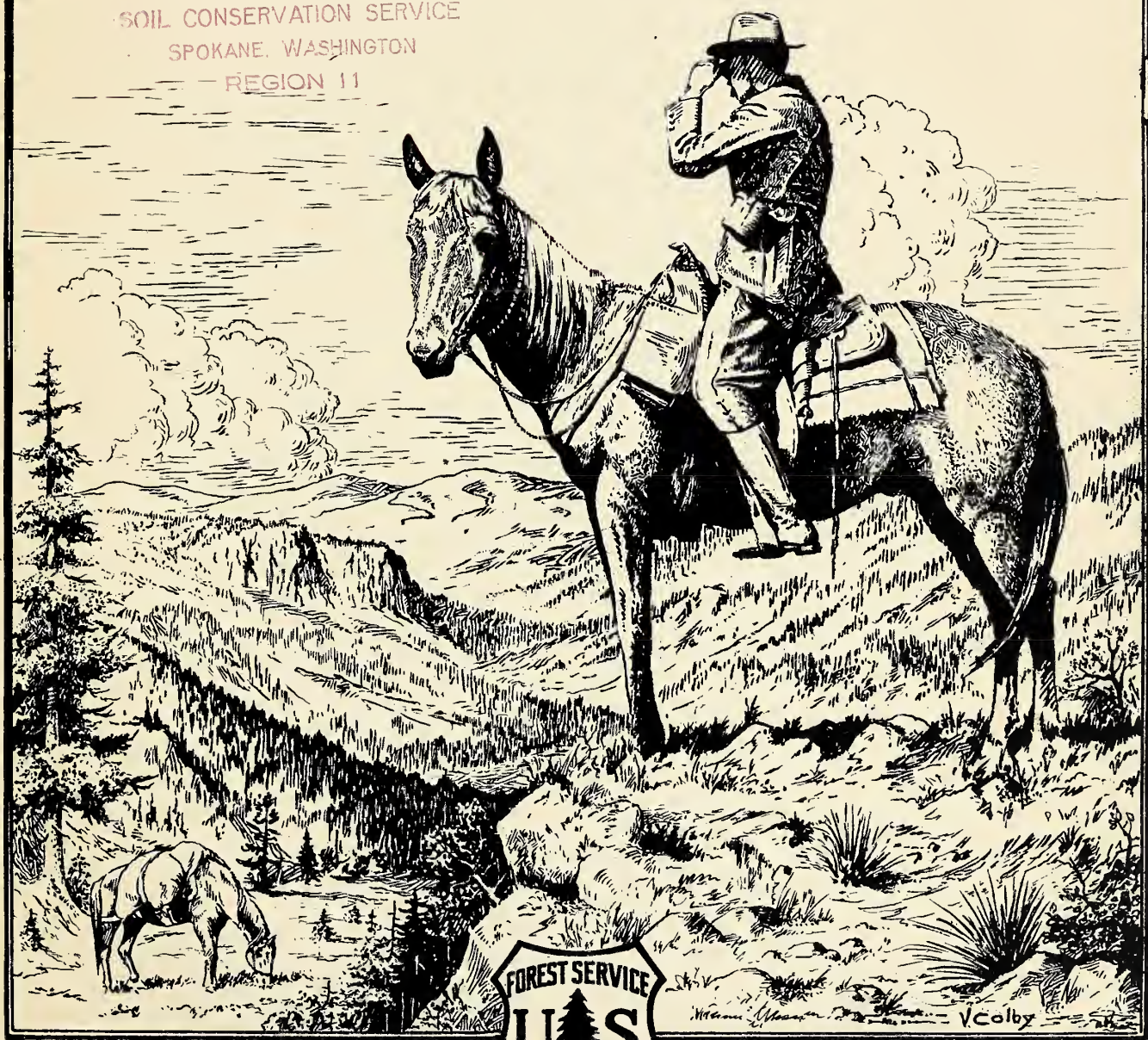
LIBRARY  
RECEIVED  
JAN 9 - 1945  
U. S. DEPT. OF AGRICULTURE

605  
F  
Sept  
1938

# THE FOREST PIONEER

REGION THREE  
THIRD QUARTER 1938

PROPERTY OF:  
U. S. DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
SPOKANE, WASHINGTON  
— REGION 11



ISSUED QUARTERLY BY  
ALBUQUERQUE

THE REGIONAL FORESTER  
NEW MEXICO





IMMEDIATE STUDY OF THE NATIONAL FOREST PROBLEM

MESSAGE

from

THE PRESIDENT OF THE UNITED STATES

transmitting

A RECOMMENDATION FOR THE IMMEDIATE STUDY OF THE NATIONAL FOREST PROBLEM

March 14, 1938. - Referred to the Committee of the Whole House on the State of the Union, and ordered to be printed

- - - -

The White House,  
March 14, 1938.

To the Congress of the United States:

I feel impelled at this time to call to the attention of the Congress some aspects of our forest problem, and the need for a policy and plan of action with respect to it.

Forests are intimately tied into our whole social and economic life. They grow on more than one-third the land area of the continental United States. Wages from forest industries support five to six million people each year. Forests give us building materials and thousands of other things in everyday use. Forest lands furnish food and shelter for much of our remaining game, and healthful recreation for millions of our people. Forests help prevent erosion and floods. They conserve water and regulate its use for navigation, for power, for domestic use, and for irrigation. Woodlands occupy more acreage than any other crop on American farms, and help support  $2\frac{1}{2}$  million farm families.

Our forest problem is essentially one of land use. It is a part of the broad problem of modern agriculture that is common to every part of the country. Forest lands total some 615,000,000 acres.

One-hundred-and-twenty-odd million acres of these forest lands are rough and inaccessible, but they are valuable for the protection of our great watersheds. The greater proportion of these protection forests is in public ownership. Four hundred and ninety-five million acres of our forest lands can be classed as commercial. Both as to accessibility and quality the best four-fifths, or some 396,000,000 acres of these commercial forests, is in private ownership.

This privately owned forest land at present furnishes 96 percent of all our forest products. It represents 90 percent of the productive capacity of our forest soils. There is a continuing drain upon commercial forests in sawtimber sizes far beyond the annual growth. Forest operations in them have not been, and are not now, conducive to maximum regrowth. An alarming proportion of our cut-over forest lands is tax-delinquent. Through neglect, much of it is rapidly forming a new but almost worthless no man's land.

Most of the commercial forest lands are in private ownership. Most of them are now only partially productive, and most of them are still subject to abuse. This abuse threatens the general welfare.

I have thus presented to you the facts. They are simple facts; but they are of a character to cause alarm to the people of the United States and to you, their chosen Representatives.

The forest problem is therefore a matter of vital national concern, and some way must be found to make forest lands and forest resources contribute their full share to the social and economic structures of this country, and to the security and stability of all our people.

When in 1933 I asked the Congress to provide for the Civilian Conservation Corps, I was convinced that forest lands offered one source for worth-while work, noncompetitive with industry, for large numbers of our unemployed. Events of the past 5 years have indicated that my earlier conviction was well founded. In rebuilding and managing these lands, and in the many uses of them and their resources, there exists a major opportunity for new employment and for increasing the national wealth.

Creation of the national-forest system, which now extends to 38 States, has been a definite step toward constructive solution of our forest problem. From national-forest lands comes domestic water for more than 6,000,000 people. Forage, occurring largely in combination with timber contributes stability to one-fourth the western range livestock industry. Through correlated and coordinated public management of timber and all other resources, these public properties already help support almost a million people and furnish healthful recreation to more than 30,000,000 each year. By means of exchanges and purchases, the Congress has for many years encouraged additions to this system. These measures should very definitely be continued as funds and facilities are available.

The Congress has also provided that the National Government shall cooperate with the various States in matters of fire protection on privately owned forest lands and farm woodlands. The States are in turn cooperating with private owners. Among other measures the Congress has also authorized an extensive program of forest research, which has been initiated and projected; Federal cooperation in building up a system of State forests; cooperative activities with farmers to integrate forest management with the general farm economy; the planting of trees in the Prairie-Plains States - an activity which has heretofore been carried on as an emergency unemployment-relief measure with outstanding success and material benefit; and, under the omnibus flood-control bill, measures to retard run-off and erosion on forested and other watersheds.

Progress has been made, and such measures as these should be continued. They are not adequate, however, to meet the present situation. We are still exploiting our forest lands. Forest communities are still being crippled; still being left desolate and forlorn. Watersheds are still being denuded. Fertile valleys and industrial cities below such watersheds still suffer from erosion and floods. We are still liquidating our forest capital; still cutting our accessible forests faster than they are being replaced.



Our forest budget still needs balancing. This is true in relation to future as well as present national needs. We need, and will continue to need, large quantities of wood for housing, for our railroads and our telephone and telegraph lines, for newsprint and other papers, for fiber containers, for furniture and the like. Wood is rich in chemicals. It is the major source of cellulose products such as rayon, movie films, cellophanes, sugars of certain kinds, surgical absorbents, drugs, lacquers, phonograph records. Turpentine, rosin, acetone, acetic acid, and alcohols are derived from wood. Our forest budget should, therefore, be balanced in relation to present and future needs for such things as these. It should also be balanced in relation to the many public services that forests render, and to the need for stabilizing dependent industries and communities locally, regionally, and nationally.

I am informed, for example, that more than \$100,000,000 has recently gone into development of additional forest industries in the southeastern section of our country. This means still more drain from southern forests. Without forestry measures that will insure timber cropping there, existing and planned forest enterprises must inevitably suffer. The Pacific Northwest contains the greatest reserves of virgin merchantable timber in the continental United States. During recent years many private forest lands have been given better fire protection there, and there are more young trees on the ground. But the cutting drain in our virgin Douglas-fir forests is about four times current growth, and unless existing practices are changed the old fir will be gone long before new growth is big enough for manufacture into lumber.

I recommend, therefore, study by a joint committee of the Congress of the forest-land problem of the United States. As a Nation we now have the accumulated experience of three centuries of use and abuse as guides in determining broad principles. The public has certain responsibilities and obligations with respect to private forest lands, but so also have private owners with respect to the broad public interests in those same lands. Particular consideration might therefore be given in these studies, which I hope will form the basis for essential legislation during the next session of Congress, to the situation with respect to private forest lands, and to consideration of such matters as:

1. The adequacy and effectiveness of present activities in protecting public and private forest lands from fire, insects, and diseases, and of cooperative efforts between the Federal Government and the States.
2. Other measures, Federal and State, which may be necessary and advisable to insure that timber cropping on privately owned forest lands may be conducted as continuous operations, with the productivity of the lands built up against future requirements.
3. The need for extension of Federal, State, and community ownership of forest lands, and of planned public management of them.
4. The need for such public regulatory controls as will adequately protect private as well as the broad public interests in all forest lands.

5. Methods and possibilities of employment in forestry work on private and public forest lands, and possibilities of liquidating such public expenditures as are or may be involved.

Facilities of those technical agencies that, in the executive branches of the Government, deal with the many phases of our forest problem will of course be available to such committee as the Congress may appoint. These technical agencies will be glad to assist the committee in assembling and interpreting facts, indicating what has been done, what still needs to be done, and in such other ways as the committee may desire.

I make this suggestion for immediate study of our forest problem by the Congress in the belief that definite action should be taken by the Congress in 1939. States, communities, and private capital can do much to help - but the fact remains that, with some outstanding exceptions, most of the States, communities, and private companies have, on the whole, accomplished little to retard or check the continuing process of using up our forest resources without replacement. This being so, it seems obviously necessary to fall back on the last defensive line - Federal leadership and Federal action. Millions of Americans are today conscious of the threat. Public opinion asks that steps be taken to remove it.

If the preliminary action is taken at this session of the Congress, I propose to address letters to the Governors of those States in which the amount of State and privately owned forest land is substantial, enclosing to them a copy of this message to the Congress and asking their full cooperation with the Congress and with the Executive Branch of the National Government.

Franklin D. Roosevelt.

As a result of the message from the President recommending study of the National Forest problem, the Senate and House of Representatives concurred in a resolution dated June 7, 1938, establishing a Joint Committee on Forestry to study and investigate and make report to Congress not later than April 1, 1939. The membership of the Committee as appointed included:

Senate

McAdoo,	California
Smith,	South Carolina
Bankhead,	Alabama
Pope,	Idaho
McNary,	Oregon

House of Representatives

Fulmer,	South Carolina
Doxey,	Mississippi
Pierce,	Oregon
Englebright,	California
Reed,	New York

The Committee met in Washington just before Congress adjourned. A hearing has been held at Boise, Idaho, in connection with the meeting of State Foresters. It is expected that additional hearings will be held at various places and opportunity will be afforded for presentation of views by organizations and individuals representing the varied interests in conservation.



# OPERATION

## WASHINGTON FIRE CHIEF VISITS REGION

Roy Headley, Chief, Division of Fire Control, Division of National Forest Administration, Washington Office, spent a July week in the Region reviewing the fire replanning project which is to be completed by January 1, 1940. Mr. Headley continued visiting several other Regions relative to the replanning project.

In a press interview, he discussed the increased use of airplanes, predicting the possible wide use of the autogyro when it is perfected to carry heavier loads; the use of small "home made" parachutes; experiments in dropping chemicals from planes; experiments with the "kempack", a four gallon chemical tank carried on the back of each fire fighter; and other novel methods of fire fighting.

Increased use of airplanes because it often is cheaper to bring in fire fighting supplies by air than by pack trains is a settled policy of the Service, Mr. Headley declared. He maintained that prevention is the best way to fight forest fires. That the prevention campaign is having results, he continued, is proved by the fact that for the years 1910-14 the average loss was 7200 acres for each 1,000,000 acres protected, while last year was exceptionally free from fires with 500 acres of timber lost for each 1,000,000 acres protected. Indications are that the loss will always be kept far below the 1910-14 average.

## GREATER USE FOR SHORT WAVE RADIOS IN FIRE CONTROL

From 1932 to 1937, the number of short-wave radio sets in use on the National Forests increased from 300 to 2300. Some of the portable sending and receiving sets developed by the Service weigh as little as 8 pounds, yet have ranges of 10 to 50 miles. First used to maintain communications with fire crews in the Pacific Northwest, the small portable set has now been adopted by every Region for emergency communication use to supplement the thousands of miles of telephone lines and other means of communication on the National Forests.

The successful use of short wave radios in Region 3 during 1937 brought about more dependence in this means of communication in 1938.

On the Coronado N. F., Supervisor Fred Winn kept in touch with the isolated Animas Division where trail maintenance work was handled during the peak of the fire hazard period. Three new sets were used on the Coronado N. F. this season.

The Crook N. F. used two new sets, in addition to those used last year, in communicating with isolated localities.

On the Tonto N. F., it was found that one detection point, Humboldt Mountain, covered the west slope of the Mazatzal Mts. Radio was used here during the danger period to secure detection that had been lacking in the past. In addition, a trail maintenance crew in the Mazatzal Mts. used this means of communication to supplement the protective organization.

The Santa Fe N. F. also used two sets this fire season.

Two sets were held in the Regional Office for emergency use.

While radio will not replace regular telephone lines in Region 3, it does fill a very important place in furnishing a means of communication for isolated crews and for communication on going fires.

#### GILA MAN-CAUSED FIRE WORST OF SEASON

On June 15, a class C fire near Iron Creek Campground on the Gila N. F. was temporarily controlled only to break out an uncontrolled crown fire.

Harried by unusually high winds and the rough terrain, 120 CCC enrollees and 60 local men under the direction of Supervisor Leonard R. Lessel and his staff, could make little headway in suppressing the blaze. Three hundred men were immediately rushed to the scene along with Regional Office and Lincoln N. F. officers to relieve the Gila fighters, who had been suppressing class C fires for ten days prior to the crown blaze.

After burning around 3000 acres and destroying valuable recreation land close to the Black Range scenic road, the fire was controlled. At one time a force of 650 men were on the line. Smoke was visible at Silver City as well as at Hot Springs, both cities being several miles distant.

#### STUDENT OF GOVERNMENT ADMINISTRATION TOURS REGION

L. O. Wolcott, representative of the Social Science Research Council, New York City, returned to his headquarters at Washington, D. C., Aug. 14, following a week's tour of New Mexico and Arizona to obtain material for a nationwide study of government administration.

Wolcott was escorted over sections of the Cibola, Santa Fe and Carson National Forests, being shown the main phases of Forest Service activity. With John Adams of the Division of Recreation and Lands, he attended a conference of State Extension Directors and SCS State Coordinators of the Southern Great Plains Area, at Eagle Nest, N. M. Wolcott was interested in observing the pooling of thought by various agencies, through the conference method. For the same reason, he inquired about the workings of the Inter-departmental Rio Grande Board, through which the Forest Service and other Federal agencies are coordinating their land management efforts in the Rio Grande Valley.

#### SOUTHWESTERN STATION PERSONNEL CHANGES

Dr. W. G. McGinnies has been transferred from the Soil Conservation Service to the Southwestern Experiment Station to serve as Chief of the Field Division of Range Research. Because of the constantly increasing importance of research in forest influences and watershed problems generally, and because of the station's added work by reason of the recently authorized flood control surveys, it had been necessary for C. K. Croperrider to devote all of his attention to those activities as Chief of the Field Division of Forest Influences. He had previously been in charge of both Forest Influences and Range Research. Mr. Pearson continued as Chief of the Field Division of Silvics.

John T. Cassady, who has been stationed on the Jornada Experimental Range for the past 4 or 5 years, was transferred June 16 to the position of Associate Forest Ecologist, Rocky Mountain Forest and Range Experiment Station with headquarters at Fort Collins, Colorado.

#### PUTTING OUT FIRES BEFORE THEY START

Ranger Engstrom of the Santa Rita District, Coronado N. F., believes it imperative to put out man-caused fires before they start.

Ranger Engstrom sent out this season a carefully prepared letter to over 150 grazing, summer home and other special use permittees, woodcutters and individuals on his key list, thanking them for past cooperation in fire prevention and soliciting their future assistance and suggesting ways in which they could do their part in fire prevention.

As a part of his campaign, he also personally contacted various eating houses, filling stations, barber shops, saloons, road crews and others, explaining the extreme danger and soliciting their assistance.



#### NEW CARSON HEADQUARTERS COMPLETED AND OCCUPIED

In November, 1937, construction of the new headquarters for the Carson N. F. was undertaken as a WPA project. The new attractive building was completed early in August, 1938, and was occupied by the Carson staff on August 16. The building is commodious and there is a large basement that can be used for an overflow if necessary. The inside has been finished as the older houses in Taos were many years ago, with hand hewn ceilings in some of the rooms and in others, latillas are used. Appropriate furnishings of desks, chairs, and tables made by the Taos Vocational School add to the appearance of the interior. The new warehouse, also a WPA project, is being constructed directly back of the office building and should be completed this year.

All in all, the new headquarters are very attractive conforming to the architectural lines in keeping with Taos and its environment.

#### PER DIEM FIRE BULLETIN WORTHWHILE STRATEGM

Per Diem Guard Bulletin No. 9 was the last 1938 issue unless unforeseen conditions arise on the Coronado N. F.

"The sincere thanks of the Forest Service is extended to all the per diem guards and cooperators who have assisted so ably in keeping down the forest fires during a period of extreme hazard. Thanks to such assistance, the area on the Forest which was burned over, amounted to only 248 acres; the total number of fires (up to August 10) was 46, of which 19 were man-caused; only 4 of these fires exceeded 10 acres in extent; all of the 46 fires were controlled before 10 a.m. the day after they started. The only flaw in this record was the needless 19 man-caused fires, all of which should never have occurred."

Supervisor Winn merits credit for the Per Diem Guard Bulletin which has kept guards currently advised as to the fire situation, stimulated interest, and promoted a more efficient organization to carry out the prevention and suppression of fires on the Coronado N. F.

#### MEDAL PROPOSED FOR HEROISM IN FIGHTING FOREST FIRES

The Wo Information Digest discloses that under "the sponsorship of the American Forestry Association a plan is being developed to raise funds to endow a national fire medal, which it is proposed to award for outstanding individual bravery or heroism on the fire line. Any individual or public officer may be eligible for the award after unquestionable evidence is presented that he has performed an act worthy of consideration for such an award. The medal may be awarded posthumously. It will be the first award of its kind to be established. The award movement came as an outgrowth of the Blackwater fire tragedy on the Shoshone Forest in August, 1937."

#### SPEAKING OF WORK PLANS

El Cibollero of June 9 asks for Ranger's attention: "Here's a work plan that worked - Bill McCommon during the 10th period programmed 43 projects of a varied character on which work was started from Nogal Camp F-51-N. At the conclusion of the period, accomplishment of 100% was recorded except for one item showing 70% completion and this was a seed collection item and Bill says there were no more seeds to collect."

#### BULL DOZER DOES THE WORK WELL

In handling mop-up work on a Class C fire that occurred on the Lincoln N. F. this season, a caterpillar tractor, equipped with a bulldozer, was used to clear line through heavy slash. It was also found effective in handling dead timber.



#### FORMER REGION THREE MEMBER TRANSFERRED

Edward N. Kavanagh, formerly Assistant Regional Forester in charge of Range Management for the North Pacific Region, Portland, Oregon, was moved to the Intermountain Region this summer and placed in charge of a newly established Division of Information and Education. A former Region Three Inspector of Grazing from May 1, 1915, to August 7, 1918, Mr. Kavanagh has many friends who will be glad to learn of his latest position in the Service.

#### FIRE PUT OUT AND CONVICTIONS SECURED ON SITGREAVES

The Sitgreaves Elkhorn supplies us with an interesting fire fighting yarn occurring on the Lakeside District:

Early on the morning of May 25, Ranger Frank Burton was called out on a fire, which had been started the evening before by wood haulers and had burned slowly throughout the night covering about two acres. When Ranger Burton arrived, he started immediately and rapidly to make a fire line. The going was pretty hard through a locust patch and he was scratched repeatedly through his clothes by the thorns. He felt a rather severe prick on his left ankle just above the low quarter shoes he was wearing. Looking down, the Ranger saw a rattlesnake close by, which he dispatched, but did not at the time connect the snake in any way with the feeling in his ankle. Later, a close examination of the ankle caused by the pain becoming more severe revealed two wounds about a half inch apart. A circle around the two marks had begun to turn a greenish cast with a dark circle surrounding the green one and a light one-quarter inch space between, a sort of rainbow effect.

By this time the fire was pretty well under control; so Ranger Burton went directly to the doctor at Los Burros Camp. The doctor said the Ranger's pulse was quickened similar to the effect of strychnine poisoning and after making an incision through each of the fang marks and applying the suction pump thoroughly, told the Ranger to go home, lie down, and remain quiet.

About an hour later the doctor became worried and decided to call upon his patient at the Ranger Station about five miles away. But the doctor was too late for the Ranger was already back on the fire. The doctor, it is related, threw up his hands in horror and exclaimed, "By God, I knew Forest Rangers were tough, but I had no idea they were that hard."

The Sitgreaves Elkhorn gives Ranger Burton credit for putting out his fire and securing two convictions in all, a \$25 fine for each of the wood haulers and a death sentence for the rattler.

#### TWO WAY RADIO DEVELOPED FOR FIRE FIGHTING VEHICLES

A WO release announces the development of a new two-way radio communication unit to be used in fighting fires. Work on the new device has been carried on by A. G. Simson, radio engineer, and associates. "The transmitting range under adverse conditions is at least 25 miles and tests under average conditions show the outfits to have a range up to 250 and even 500 miles," Simson says.

Vehicles used in fire fighting or patrol will be equipped with the new radiophone device in the future so that rangers and other officers can keep in touch with headquarters at all times. In the past, men on the way to fires have been out of communication with their base station since their portable radio equipment could only be set up after stopping.

The new equipment will permit fire chiefs to dispatch trucks on long distance runs and transmit details as to the exact location of the fire while the truck is on the road. The dispatcher also can recall fire fighting equipment or re-route it to a more dangerous or more recently reported fire. Long and uncertain runs may thus be eliminated.

# TIMBER MANAGEMENT

## ARTICLE PUBLISHED ON SOUTHWESTERN FOREST MANAGEMENT

"Southwest Has Active Timber Operations" is the title of an article by Assistant Regional Forester Quincy Randles, published in the June, 1938 issue of "Timber Topics," an Allis-Chalmers Mfg. Co. of Milwaukee, Wisconsin, publication.

The woodland forests of the Southwest cover over 20,000,000 acres normally between elevations of 5000 to 7000 feet on areas receiving in excess of 12 inches annual precipitation. Above the woodland forests and extending to timberline are found some 10,000,000 acres of saw-timber species of which 80% is ponderosa pine. The volume of timber in this region is estimated at 38,000,000,000 feet with the ponderosa pine type supplying 90% of the logs to the 125 mills cutting on the average of 250,000 M feet annually.

The magnitude of Southwestern forests having been pictured, the article declares that over 30 years logging experience on the National Forests has proved the soundness of the selection method. "The retained stand has shown the ability to pick up in growth following release through the removal of the older trees, and growth on the reserved stand over the 30-year period has amounted to approximately 2½% net annually." Many of the cutover areas now carry a loggable volume of timber, which will permit again of a light selection cut and the removal of trees declining in vigor.

Logging in the Southwest became a major industry with the building of the transcontinental railroads in the late 70s and early 80s. These railroads constituted a market for ties and other construction material and made possible and practical the movement of timber to general markets. Logging railroads are now replaced entirely by roads or limited to main lines with practically no spur construction.

Another change in logging methods has been the shifting from horses to tractors in moving logs from the stump to the mill or railroad landing, until at present approximately 75% of timber logged is skidded or bunched with tractors. The article concludes that the tractor when correctly handled is a desirable tool in forest management.

## KAIBAB SALE AREA RECOVERS FROM CUTTING

On the Grand Canyon sale area, Kaibab N. F., seedling plots were established 7 years ago by the project sales force. These are paired plots, one pair in grama grass (#1) and one pair in bunch grass (#2). Plots #1, of which one was fenced, had 841 seedlings and the open plot had 1,130 seedlings when established. In the spring of 1938, the 841 seedlings had been reduced to 90 and seedlings on the open plot to 30, a loss of 89.3 and 97.4%, respectively. The seedlings in the fenced plot are now 6 inches high and quite vigorous. Those outside are of poor form and have been damaged. Severe losses on both plots occurred in 1932, 1933 and 1934; losses on both plots are now low. The #2 paired plots in the bunch grass started with 494 seedlings in the fenced plot and 226 in the open. The survivors now total 73 in the fenced and 48 in the open, a reduction of 85.2 and 78.8%, respectively. The seedlings on this pair of plots are vigorous and about 8 inches high. Both series of plots are on limestone soils, but site conditions on the #2 plots are considered very much superior to those in the #1 plots. In general, the stand on this sale area has fully recovered from the shock of cutting, is growing and the young growth is in good condition.



## TIMBER CUT AND SALES STATISTICS

The timber cut in the National Forests of Region 3 for the fiscal year 1938, under commercial sales amounted to 112,365 M feet, with a value of \$252,-795.79 under land exchange, 18,835 M feet with a value of \$42,378.46; and sales at cost, 1,814 M feet with a value of \$1,836.77, a total for the fiscal year of 133,014 M feet with a total value of \$297,011.02.

This is an increase of 14,719 M feet valued at \$31,021.79 over the 1937 fiscal year cut, which was 118,295 M feet, with a value of \$265,989.23. The 1938 fiscal year cut for the region shows a decrease of 21% and an increase of 52% when compared with the high and low cuts for the 10-year period, 1929 to 1938. The cut for 1930, the high year during the period, was 161,909 M feet, while that for 1935, the low year, was 64,139 M feet.

## EVALUATING CORONADO SALE OF 30 YEARS AGO

An examination of the first timber sale areas on the Chiricahua Division of the Coronado N. F., which were cut over 30 years ago, was recently made to determine the results of this early cutting. Increment borings were made on a few of the seed trees reserved at that time, and these showed diameter increases for representative ponderosa pines of 10.6 inches, Douglas fir and Apache pine, 8.8 inches during the 30 years. This is on the average a greater growth than is shown for these species further north in Arizona. The sale area is fairly well reproduced and the borings indicate that the reserved stand is putting on growth at a good rate. The National Forest personnel handling this sale can take considerable pride in the job.

## PRECIPITATION RECORD PLOTTED ON CIBOLA

The precipitation record from 1905 to date at stations on and near the Cibola N. F. have been plotted by the Cibola for ready comparison. Of the 8 stations included, 4 are in the woodland type, with only 1 in the sawtimber type. Records at these stations are not of direct value as a guide to the management of the sawtimber, but are valuable in the management of forage resources.

The plotting of the annual precipitation for several stations permits of a ready comparison and study of the ups and downs. The curves for the several stations in general follow much the same general trends, but also show variations in some years and clearly bring out that in the Southwest annual precipitation varies greatly within a relatively short distance.

## FOREST FLOOR BENEFITS THE SOIL

Don't tidy up forests too much, by removing fallen timber and otherwise clearing the ground, is the advice of a leading Swiss ecologist, Dr. Arnold Pictet, the July issue of Science declares.

"If you clear away all such accumulations of 'rubbish' you deprive the forest of much of its biological working capital. Trees are a soil-exhausting crop, Dr. Pictet points out. They withdraw a large proportion of the soil's original store of nutrient substances and lock it up in their stems. When they fall, the swarming destructive life of the forest floor--insects, worms, fungi, bacteria--unlock these hoardes and return the accumulated capital to the soil as humus. Lumbering operations inevitably carry off a good deal of this capital to market. Fire destroys it, not to be replaced for centuries. Fallen trunks, and forest litter generally, can re-invest a part of it in the soil."

While not intending to take any credit from Dr. Pictet, the Southwestern Station has for many years advocated letting the needles, leaves, and twigs lie where they fall, on areas subjected to wear and tear from man and beast, such as at ranger stations, recreation areas, etc., for the very purpose recommended by Dr. Pictet.



# WILDLIFE AND RANGE MANAGEMENT

## WILDLIFE CHIEF MAKES ANNUAL INSPECTION

Dr. Homer L. Shantz, Chief of the Division of Wildlife Management, Washington Office, arrived in the Region, Aug. 10, to go over game problems, conditions of herds and ranges. Dr. Shantz had just returned from Alaska where he had spent considerable time surveying wildlife resources on the National Forests there. He reported plenty of forests in virgin condition and that game, fur, and fish production are among the most important resources.

Accompanied by R. P. Boone, Dr. Shantz looked over Kaibab North. They found game conditions very satisfactory there and food conditions favorable. The regular controlled deer hunt in that area will be conducted this winter, Boone reported. Contacts were made with Arizona wildlife leaders while visiting the Tonto and Coronado National Forests.

Accompanied by Supervisor Fred Winn, Dr. Shantz and Mr. Boone went over part of the Gila wilderness area. Supervisor Winn saw the area for the first time in thirteen years, and was well pleased with range recovery, but disappointed with the encroachment of roads.

Concluding his inspection on Aug. 27, Dr. Shantz left for Yellowstone Lake, Yellowstone National Park, to attend the annual convention of the Western Association of Game and Fish Commissioners.

## SERVICE PARTICIPATES IN ANNUAL CONVENTION

Among the many prominent speakers appearing on the program of the annual convention of the Arizona Wool Growers Association in Flagstaff, July 12 and 13, were two Forest Service officials.

James A. Scott, Acting Assistant Regional Forester, discussed the new distribution policy and the general policy for establishing limits and handling grazing preferences on the National Forests. Director Arthur Upson from Southwestern spoke on the "Value of Range Research."

## IMPRESSIONS OF A VISITOR

G. D. Pickford writes in Six Twenty Six, monthly bulletin of the North Pacific Region, that he had occasion to visit the Santa Rita Experimental Range, south of Tucson, in the foothills of the Santa Rita Mountains.

"In this semi-desert country grama grasses, mesquite, burrow weed and various species of cactus predominate. It was surprising to know that the range has supported one cow to 34 acres yearlong since the reserve was put under management in 1915. June is the end of the grazing year and also the low point in forage production, yet the cattle which had subsisted on dry feed for some months were sleek and fat. At the time I visited the range, June 21, temperatures were well above 100 degrees and the cattle were mostly shaded up beneath mesquite trees, browsing the green mesquite leaves and pods. At some seasons, according to the men in charge of the reserve, the cattle browse to some extent on the cholla cactus (which is as prickly as a porcupine's back and about as palatable as a cast-off scrubbing brush) with good cured grass all around them. Obviously there is no accounting for taste, even in cows."

---0---

Of the 23 indicator grasses of utilization on the National Forest ranges of the Southwest, only blue grama is a primary indicator on every Forest.

### STOCKMAN TRAINS PERSONNEL IN FIRE PREVENTION

On Regional Forester Pooler and Inspector McKenzie's trip to the Apache and Gila National Forests in the spring, they met Mr. Manuel Otero, President of Bergere Estate, Inc. In discussing fire conditions, Mr. Otero stated that his outfit had not had a fire on their range for the past two years and that in an effort to continue that record his employees totaling 125 had been called together and instructed in fire precautions.

Instructions have been given and followed of clearing a space of ten to twelve feet in diameter of all inflammable material, and then digging a pit in the center which is rocked up on three sides making it nearly impossible for sparks to get out unless hit by a whirlwind. The fire is put dead out before camp is moved. Ranger Tucker, Gila N. F., stated that in finding an old camp it was possible to determine whether or not it was one of the Otero camps by the precautions taken. The Bergere Estate grazes over 14,000 head of sheep on the Gila and Cibola National Forests. Mr. Otero is to be commended, and if other stockmen can be induced to practice fire prevention to a similar degree man-caused fires will be reduced.

### BEAVERS AID MAN TO CONSERVE SOIL AND WATER

An article in the magazine section of the Aug. 28 Albuquerque Journal, illustrated with Forest Service and Department of Interior photographs, describes the work of the beaver in soil and water conservation. The article cites a report of Director F. R. Carpenter of the Division of Grazing to the Secretary of the Interior, which stated that while the average cost to trap and transport a beaver to the newest field of operations in Idaho was \$8, every beaver is worth \$300 for conservation purposes.

"One planting of beavers has constructed 17 dams on a small stream which a few years ago ran barely enough water for a horse or cow to drink. Their construction work made a continuous water supply for the district, with ponds deep enough to form meadows along the formerly eroded stream .... Within the next few years the beaver will have built up a water reserve that once was destroyed."

Water behind the beaver dams is released in a steady flow into the stream after being impounded from the last heavy flow in the brook. Many beaver dams thus prevent floods and damaging erosion due to the rush of flood waters. Above such dams, moreover, sediment is precipitated which otherwise would be carried down to fill up the basins of costly reclamation and other dams.

More than 4,000 beavers have been put to work by the Forest Service, Division of Grazing, and Bureau of Reclamation, the article states.

Regional office officials commented on the article to the effect that there is a place for the beaver in this Region on the headwaters in the back country, but it has been found that they are destructive if placed in irrigated sections, in areas where improvements would be flooded by beaver dams, or in areas where the food supply is limited, the latter in some instances resulting in the removal of trees desirable for scenic purposes.

### RECORDS BROKEN ON GILA

The Silver City Daily Press declares that all records were broken, Sunday, May 15, opening of the 1938 fishing season. Approximately 1500 fishermen, many accompanied by their families, entered the Gila N. F. to enjoy a day angling for trout, and picnicking.

More significant was the fact that with this record number of persons going into the forest, not a single man-caused fire occurred, showing strict observance of all rules to prevent forest fires. Supervisor Lessel commented that he was especially appreciative of this spirit of genuine cooperation with Forest Service officials by all those enjoying outings on the Gila N. F.



# RECREATION AND LANDS

## MONUMENT INSTALLED FOR INDIAN BATTLE

The late Will Barnes who labored so prodigiously for the preservation of historic landmarks of the early West as Secretary of the U. S. Geographic Board, would have been especially glad to view the monument recently installed by the Service with CCC labor to commemorate one of the last battles between U. S. troops and the wily Apache. For Barnes was one of the leaders in the movement to establish the monument recently erected at Battleground Ridge, site of the battle of Big Dry Wash occurring on July 17, 1882. Big Dry Wash corresponds with East Clear Creek on the Coconino N. F.

Installation of the monument makes of interest observations of participants in the engagement. C. P. Wingfield noted that the battle started about 11 a.m. and lasted two or three hours, with the Indians from San Carlos Reservation scattering after putting up a hot fight for about an hour. "Right in the thickest part of the fight one of Al Siber's Scouts saw two of his brothers and his father with the Indians. He threw his gun down and started to run up to his folks. Siber told him to halt. He did not heed him. Siber raised his rifle and fired, shooting him in the back of the head."

General Thomas Cruse who took part in the fight observed that the site of the battle was a "side canyon of Canyon Diablo and about six miles from the rim of Tonto Basin, so deep and narrow that I saw stars shining at 3:30 p.m." Will Barnes was at the scene in 1888 and found no end of remains of dead horses, pack mules and possibly human remains, for it was generally understood that the troops did not bury the dead Indians. E. G. Miller, Assistant Regional Forester in Lands, was in the area some ten years ago and found at that late date bones scattered up and down the canyon. Only around 20 Indians were accounted for as dead in the engagement, but many were wounded and probably dragged themselves out of the immediate area to die.

## ALMOST ALL HOMESTEAD ENTRIES PATENTED

A recent check of records in Lands shows only twenty-five pending unpatented homestead entries on the National Forests of Region 3. This means that we are approaching the end of what was once a very big job in Lands and on many Ranger Districts. There was a time when we listed for homestead entry as many as 100 tracts of land in a single month, when the classification claims work required a large part of the time of the Chief of Lands with specialists working on nearly every Forest and several clerks on this work in the Regional Office. The claims work called for inspection of homesteads periodically by rangers with requirement for special reports in so-called danger cases. Many hard fought hearings as to compliance with the law after entry were fought and won by the Regional Law Officer with help from local Forest Officers. As a result of the classification and claims procedure, the agricultural lands within the National Forests are furnishing homes and livelihood to many families. On the other hand, a large number of homesteaded areas have been found to be submarginal and have been abandoned. The trend is now to reacquire these submarginal lands in order that they may be returned to their highest use as part of the National Forests.



## INTERDEPARTMENTAL RIO GRANDE BOARD

The Interdepartmental Rio Grande Committee which was set up about a year ago by joint action of the Secretary of the Interior and the Secretary of Agriculture has been designated as the Interdepartmental Rio Grande Board. This was done on March 24, 1938, again by joint action of the two Department heads.

The Board now consists of four representatives of each Department:

### Department of the Interior

W. V. Woehlke, Department of the Interior.  
A. D. Ryan, Division of Grazing.  
L. E. Foster, Bureau of Reclamation.  
S. D. Aberle, Bureau of Indian Affairs.

### Department of Agriculture

R. I. Kimmel, Coordinator, Southern Great Plains.  
John A. Adams, Forest Service.  
Hugh G. Calkins, Soil Conservation Service.  
M. M. Kelso, Bureau of Agricultural Economics.

Mr. Woehlke and Mr. Calkins have been designated respectively as Chairman and Vice Chairman.

The Board is charged with certain duties in an advisory capacity relating to formulating and recommending programs involving work of the two Departments in the Rio Grande watershed.

The territory to be served by the Board will be the watershed of the Upper Rio Grande River in the States of New Mexico and Colorado. The Board may by agreement of the Secretaries extend the territory to the contiguous inland drainages and related contiguous areas.

Through more than a century of intensive misuse and overuse of the basic resources of soil and water, the watershed is now in a critical condition and a very large proportion of the rural population and a smaller proportion of the urban population has become dependent upon the Federal Government for a part of its living through direct and work relief. It will be the duty of the Board to recommend to the heads of the participating agencies appropriate policies and programs which will coordinate the activities of the Federal agencies operating in the watershed and to obtain the cooperation of other public agencies and persons in making effective an approved long-term program of land-use, social and economic adjustments.

## LAND ACQUISITION CHIEF VISITS REGION

Axel G. Lindh, Chief of Division of Land Acquisition, Washington Office, arrived in Albuquerque June 3 and spent 10 days in the Region, largely in the field, visiting the Lincoln, Cibola, Santa Fe, and Carson National Forests with Mr. Strickland of Recreation and Lands.

The WO Chief of Land Acquisition has had 15 years of experience as a forest ranger and supervisor in Western Regions. The purpose of his visit was to obtain a general view of the acquisition problems in New Mexico.

---O---

The tendency nowadays to wander in wildernesses is delightful to see. Thousands of tired, nerveshaken, overcivilized people are beginning to find out that going to the mountains is going home; that wilderness is a necessity; and that mountain parks and reservations are useful not only as fountains of timber and irrigating rivers, but as fountains of life.

-- John Muir.

---O---

## HEREAFTER PRIMITIVE AREAS DESIGNATED AS WILDERNESS AND WILD AREAS

The term "primitive area" has been discarded. Hereafter the established primitive areas that contain at least 100,000 acres each will be known as wilderness areas. The list will include the Pecos, Blue Range, Gila, Black Range, Mazatzal and Superstition Mountains. Areas such as Mt. Baldy, Sycamore, Chiricahua, Galiuro, White Mountain, Pine Mountain, San Pedro Parks and Sierra Ancha, that contain less than 100,000 acres each, will be designated wild areas. According to the new definitions, wilderness areas will be characterized by primitive conditions of transportation and habitation, will embrace areas of at least 100,000 acres, will contain no provision for the passage of motorized transportation, and will exclude summer homes, resorts, organization camps, and commercial logging. Grazing, prospecting and hunting generally will not be barred. Wild areas will be officially defined as "Areas of national forest land in single tracts of not more than 99,999 acres and not less than 5,000 acres may be designated by the Chief, Forest Service, as 'wild areas' within which there shall be no roads or other provision for motorized transportation, no commercial timber cutting and no occupancy under special use permit for hotels, stores, resorts, summer homes, organization camps, hunting and fishing lodges, and similar uses. Grazing of livestock, development of water storage projects, and improvements necessary for fire protection will be permitted subject to such restrictions as the Chief deems desirable in order to avoid conflict with the natural environment. Within such designated wild areas no public airplane landing fields other than ones already existing will be permitted."

## FARMING IS A SCIENCE IF THERE EVER WAS ONE

Careless farming may waste in a few years the soil that nature took centuries to build. At one erosion experiment station of the Soil Conservation Service, scientists estimated it took nature 400 years to make every inch of top soil, but in 16 years all the topsoil would wash away if the land were planted to corn year after year.

Under a 3-year rotation of corn, wheat, clover, and timothy, this same topsoil would last 99 years. Planted to a permanent cover of meadow grasses, the close-growing roots would protect the soil for nearly 4,000 years. This shows the advantages of taking steep, erodible hillsides out of cultivation and retiring them to grass, trees, or some other soil-protecting crop. It also indicates why crop rotations help maintain soil and soil fertility.

## ELKS ENJOYED PICNICKING ON THE PRESCOTT

Supervisor Nave has a nice letter from Harry F. Dise of the Arizona State Elks Association: "...From the many highly favorable comments I have received, I am sure I express the deep appreciation of every Elk who attended the picnic at the Mingus Mountain Recreational Area....I think I have attended every picnic held by the Elks Lodges in the northern part of Arizona, and I can truthfully say this last one has been the most successful so I hasten to pay the compliment due you and your staff, for making it such . . ."

## CROOK RECREATION AREA HAS ROMANTIC HISTORY

In the Blue Ridge Mountains on the Eagle District, Crook N. F. is Honey-moon Recreation Area. The Associated Press reports that in 1909 a forest ranger was assigned a station close to where the Area is now located. With him he took his bride and called the station, "Honeymoon."

Although in later years, the station was moved to Eagle creek, the old ranger station is now headquarters for Honeymoon ranch, and about half a mile away from the ranch house is Honeymoon Recreation Area.





# ENGINEERING

## WPA RESPONSIBLE FOR ENGINEERING ACHIEVEMENTS IN REGION

A review of WPA engineering projects sponsored by the Forest Service in Region Three shows that valuable use has been made of this work program:

Construction was completed in July of the Juan Miller road on the northeast section of the Crook N. F., connecting the Coronado Trail via the Juan Miller Ranch with Blue River. The road was started a couple of years ago by the CCC, but on account of camp movements could not be finished. Construction of the remaining  $4\frac{1}{2}$  miles of road went ahead as a WPA project and was rapidly pushed to completion. The twelve miles of new road are expected to be of great benefit to ranchers who formerly had to pack their supplies from the Coronado Trail over rough country to the Blue River basin.

Several miles of the Aspen Basin Ranch Road on the Santa Fe N. F., starting from Hyde Park, near Santa Fe, N. M., have been completed this summer. The road is being built through Little Tesuque and Big Tesuque Canyons into the Aspen Park area. A connection with the Santa Fe-Pojoaque highway will complete the planned loop out of Santa Fe. This project of approximately 13 miles of new road is expected to take a year's time to finish. Completion of the road will open up one of the most beautiful scenic drives in the Southwest as well as a big recreational area for summer recreation and winter skiing.

Excellent progress is reported in the construction starting July 1 on the Santa Fe N. F. of the Gallinas Road from Las Vegas into Gallinas Canyon. Completion of this project will make nearby recreation areas more accessible to Las Vegas, N. M., and increase the safety of a narrow and winding road.

Excellent progress is also reported in the construction of the Penasco-Trampas road on the Carson N. F., which began July 25. Six miles of new road will facilitate forest administration and provide adequate fire protection as well as inter-community travel.

In addition to the above projects, the following are awaiting approval or have been approved and will be started in the near future:

The Luna-Bill Knight Gap Road project proposes the betterment and surfacing of 26 miles of road running north from Luna, N. M., within the Apache N. F., toward U. S. Highway 60. The Heber-Morman Crossing Road project provides for construction of 15 miles of road eventually connecting Heber, Ariz., with the road that leads to Winslow. Since it is impossible to get into this area in the Sitgreaves N. F. at present, the project aims to facilitate forest administration. The Bear Trap Road project aims to improve 5 miles of road on the Cibola N. F. by eliminating present steep grades in some places.

## MOTOR-VEHICLE REGISTRATION RALLIES SHARPLY

Public Roads for July, 1938, contains a table embodying State Motor-Vehicle Registrations for 1937. Arizona shows an increase of 14,175 registered vehicles over 1936, a 12.3% gain, the highest in the nation. New Mexico registered an increase of 9,377 motor vehicles in 1937, a gain of 8.6%, placing New Mexico among the first five states in percentage increase for 1937.

At the end of the 1937 period, Arizona had 129,210 and New Mexico 118,106 motor-vehicles registered.





# INFORMATION AND EDUCATION

## FOREST SERVICE LECTURER TOURS REGION

Dr. Herbert N. Wheeler of the Washington Office Division of Information & Education made a lecture tour of Region 3 from July 11 to July 22.

Dr. Wheeler is a forester of long experience having entered the Service in 1905 as a ranger. He was a Supervisor for 15 years on National Forests in Colorado and California, and has been engaged a long while in educational work for the Service throughout the country.

For many years, Dr. Wheeler has lectured on forestry, appearing on several occasions in the Southwest. Old timers vouch that his talks are outstanding and that his style is humorous, dramatic, interesting. His lectures are called forestlogues, and are accompanied by pictures in color thrown on the screen.

During his Southwest tour, Dr. Wheeler spoke from KTAR, Phoenix, on July 15, on the subject of "How Forestry Affects the State of Arizona." He also broadcasted over KOB, Albuquerque, on July 21, speaking on the subject, "How Forestry Affects the State of New Mexico." In addition to broadcasting, Dr. Wheeler spoke at Silver City Teachers College on the evening of July 11, and continued lecturing at the University of Arizona, the Woman's Club Building in Safford, Arizona State Teachers College, Tempe, Arizona State Teachers College, Flagstaff, University of New Mexico, and Las Vegas Teachers College. The subject of each lecture was "The Lure of the Forests."

## SOUTHWESTERN DEMONSTRATES WORK

On the evening of May 6 and the following day the Southwestern Forest & Range Experiment Station held a conference and field demonstration at the Parker Creek Experiment Station. Present were the president, general manager, and chief engineer and a member of the Board of Governors of the Salt River Valley Water Users Association, the president of the Arizona Federation of Farm Bureaus, and representatives of the Extension Service, Bureau of Plant Industry, Bureau of Agricultural Engineering, Bureau of Agricultural Economics and Weather Bureau. In addition to the Station staff, King of the R.O., Grubb, Rowley and Fears of the Creek N. F., and Humbert of the Tonto N. F. attended.

The installation and experiments were explained by Cooperrider, who was host and Master of Ceremonies, assisted by Hendricks and Sykes. As would be expected the visitors were chiefly interested in water yield and the effect vegetation has on it. They were greatly impressed by the scope and accuracy of the work and left well satisfied with the trip and with a promise to return.

## DOUGLAS CELEBRATION COLORFUL

The Coronado Bulletin states that the combination celebration of Independence Day and the annual convention of the Arizona Department of the American Legion in Douglas on July 4 was viewed by "oldtimers" as the biggest and best ever held. "The parade was more than two miles long and contained 1147 people with 51 floats. The Forest Service float which depicted a timber covered mountain on which stood the youth of the nation, received honorable mention and was loudly applauded by many. It has been conservatively estimated that approximately 15,000 people viewed the parade.

### IGNITZE MAKES HIS DEBUT

"Ignitze" (pronounced Ignites), the fire monster exhibit forty feet long, designed and built in the Regional Office, made his debut in the Frontier Days Parade at Prescott, July 1 - 4, before an estimated 12,000 people.

He rolled his eyes and belched smoke from both nostrils, puffing it out of a huge corn cob pipe fastened to one side and a mammoth cigarette to the otherside of his ravenous mouth, bellowed like three or four bulls, switched his tail and nodded his head which sported giant horns of matches. A uniformed forest officer on horseback led him by means of a large rope attached to a ring in the monster's nose, and carried a banner bearing the slogan, "Ignitze the Fire Monster, Don't Let Him Loose in the Forest."

Supervisor Nave of the Prescott N. F. did not give out any information of how many horses were left in the parade after taking a glance at "Ignitze"; however, it is hoped that there were no casualties on his account.

### PR CITATION

The Lincoln Bulletin gives Ranger Gray credit for a successful P.R. project: "Hats off to Ranger Gordon Gray of the White Mountain District, when it comes to genuine interest in P. R. work. Gordon has taken every advantage of contacting the schools in or adjacent to his district and offered a cash prize of \$5.00 for the best essay on 'Our National Forests' limiting contestants to the eighth grade."

Ranger Gray was so pleased with contest results that he plans to present the winner next year with a cup or other suitable trophy.

### KAIBAB AND COCONINO ARE MOTORCADE CONSCIOUS

The Williams News commented on the first Williams motorcade sponsored by the Kaibab and Coconino N. F. on July 24, taking in the 142 mile loop trip from Williams south over the Verde Valley Road to Jerome, Clarkdale, Oak Creek, Flagstaff and return to Williams: "The U. S. Forest Service performed a splendid service for this vicinity on Sunday when it conducted the motorcade over the south road and back by Oak Creek and Flagstaff. This region has great potential value for this section as indicated by the delight of the visitors from other states who took the trip."

With Assistant Supervisor Kendall of the Kaibab at the helm of the pilot car, the motorcade left Williams with each car of the caravan marked by a white metal plate fastened to its rear bumper, and each member of the party in possession of an attractive motorlog. At the Pine Flat Recreation Area in Oak Creek Canyon the group was met by Supervisor Hussey, Ranger Pilmer, and Guard Pidgeon of the Coconino N. F., who had the coffee water boiling. Following the luncheon stop, the motorcade proceeded to Flagstaff and returned to Williams via U. S. Highway 66.

Included among the persons taking the trip were 8 out of state tourists, one a world traveler. The Kaibab staff called a general meeting of William's businessmen later to present the practicability of their sponsoring the motorcade idea as a regular tour. Sensing the possibilities of attracting the many tourists who travel through Williams on U. S. 66, the alert Williams News noted that, "Hundreds of tourists would take this trip each week, if they but knew of the beauty of the drive and the many prehistoric ruins which may be seen on this route."

Due to the rapidly growing popularity of the motorcades, many were held throughout the summer season. Tourists were invariably profuse in their praise of the trip and are passing the word on. Interest is also growing among the residents of Williams. Tentative plans call for Kaibab and Coconino officials to work out motorlogs for every available side trip from both Flagstaff and Williams, and to use the logs interchangeably from both towns.



# C.C.C.

## OFFICE OF CCC ACTIVITIES ESTABLISHED IN DEPARTMENT

A memorandum from the Office of the Secretary, Department of Agriculture, announces the creation of the "Office of CCC Activities" as a unit in the Office of the Secretary, with a Chief who will have general Department-wide responsibility for the administration of CCC programs carried on by the several bureaus. The duties of the Chief of the Office of CCC Activities will include the coordination of these activities into a unified program; to have general oversight of CCC matters pertaining to finance, budget, equipment, personnel, location of camps, etc.; to be responsible for the coordination and integration of CCC activities with other programs of the Department; to make regular and special reports; and in general, to handle all CCC matters for the Department which do not require the attention of the Secretary.

Mr. Fred Morrell is designated as Chief of the Office of CCC Activities of the Department and is also designated as the Secretary's representative on the Advisory Council of the Director of the Civilian Conservation Corps. Mr. L. C. Stockdale is designated as Assistant Chief and authorized to serve as Acting Chief in the absence of Mr. Morrell."

## ENROLLEE TRAINING CHIEF VISITS REGION

H. R. Kylie, Acting Chief of the Enrollee Training Division, at present supervising safety and training matters for the Washington Office, visited Region Three, Aug. 1 - 6, digging into CCC safety and training matters and regular safety problems. Mr. Kylie, accompanied by Administrative Assistant J. T. Bonner, inspected camps on the Carson and Santa Fe Forests.

Mr. Kylie commented that the CCC has a better safety record than that of all industry combined. He attributed this accomplishment to the training the enrollees are receiving in good work habits and to the observance of safety regulations, and stated that the job-instruction program of the Forest Service is helping to turn out trained CCC enrollees who can get and hold jobs.

## CCC CONSTRUCTED ROCK FLUME RECEIVES PRAISE

Supervisor C. E. Moore, Lincoln N. F., writes that the rock lined flume constructed by Camp F-24-N above Mountain Park, N. M., is not only an excellent piece of masonry work but forms a definite erosion control point in the channel of Fresno Canyon. "The flume is parallel and adjacent to the Cloudcroft road and has created a great deal of very favorable comment by the public. The class of this work is of the highest order and indicates that the 'on the job training' carried on by Superintendent Wood and the foremen in charge is quite effective."

## HAVE YOU HEARD THIS ONE?

The Associated Press reports that Director Robert Fechner of the Civilian Conservation Corps might find it a bit difficult to answer this one:

"The Carlsbad Caverns are just too wonderful," a woman visitor to the world-famed underground caverns in New Mexico told Joseph A. Bursley, Director of the New Mexico Tourist Bureau.

"Were they built by the CCC?"

### AGEE INSPECTS R-3 CAMPS

Fred B. Agee, Acting Chief of Coordinating Division, CCC Group, Chief's Office, Washington, visited practically all Forest Service CCC Camps in the Region from July 15 to Aug. 9, getting a cross section of the work program.

Mr. Agee was accompanied on his visit to New Mexico camps by W. T. Doherty, CCC Inspector, and was guided on his tour of Arizona camps by E. P. Ancona, CCC Administrative Officer.

Mr. Agee was particularly impressed by the CCC fish stream improvement work done two or three years ago on Espiritu de Santo Creek, tributary of the Pecos River, on the Santa Fe N. F. He said fishing conditions have been improved by the dams and the deflectors, and that stream bottom fencing has created more shade and contributed to resodding of the banks of that creek.

### BOOSTS CCC CREW MORALE

Marvin Johnson, Foreman in charge of Recreation Construction at F-53-N, Glorieta, N. M., teaches a supplementary training course once a week which his entire crew attends. One week each member was asked to bring in a list of good work habits. In class the ideas were pooled and a group list made. It was suggested that the enrollees should bring a list of good working techniques and also safe and unsafe methods to class the next week. While visiting the Regional Office, Mr. Johnson remarked that the class conference on good work habits noticeably stimulated interest and boosted morale on the job.

### LECTURE COURSE FOR ENROLLEES

Rex King, Chief of Information and Education, began a lecture course on Conservation at the Conservancy Bench Fly Camp in Albuquerque, with an introductory talk, Monday, June 13.

This idea was originated by Rockwell Davis, District Educational Adviser for the CCC, and the course arranged by Henry Johnson, Camp Educational Adviser with the assistance of Administrative Assistant J. T. Bonner and others from the R.O.

Fourteen lectures by specialists from the Forest Service, Soil Conservation Service, Division of Grazing and the Biological Survey were given weekly from 7 to 7:30 a.m. It is believed that the lectures gave the enrollees a better understanding of how their jobs fit into the main job of conservation.

### AN A-1 JOB

The Lincoln Bulletin of July 14 congratulates the CCC staff men and enrollees on that Forest upon the progress of a construction job, in a way that should make both the technical personnel and enrollees proud.

"The Cloudcroft-Mayhill telephone line now under construction from both ends by Camps F-24 and F-32 can be truly rated an A-1 job. Both Supt. Wood and Supt. Craig have constructed many miles of telephone line but this tops them all. Stubs and poles have been carefully selected and the alignment has been carefully done by Engineer Stephens. The job is progressing very nicely and goes to prove that with the same material, same expense, but with more interest and proper planning, one can turn out an A-1 job as quickly and just as economically as he can a second-rate job."

### SAFETY PUT ACROSS AT F-52-N

Safety meetings are put over with a punch at F-52-N on the Gila N. F. according to Project Superintendent Kirchman. Using an amplifying system, safety broadcasts are made from Station J-O-K-E at the end of the recreation hall. Safety points are planned in advance and put across effectively without waste of time. Fifteen minutes of lively entertainment by camp talent completes the broadcast.



## PIONEER'S PAGE

### NEW APACHE HEADQUARTERS DEDICATED

Gustav Becker, Pioneer of the West, who spoke at the elaborately planned dedication program for the new Federal Building in Springerville, June 1, likes to recall how he built the one story Apache headquarters with great difficulties attending the \$500 limit back in 1910. With later additions this one story building was used until it was torn down in 1936 to make way for the present Federal Building, occupied by the Apache N. F. since January 10, 1938.

Others making short addresses included Governor R. C. Stanford; Hon. Levi S. Ullall, Judge Superior Court, St. Johns, Ariz.; Mr. B. B. Shimonowsky, State Commander American Legion; Senator Carl Hayden; Mr. C. W. Pfaffenberger, U. S. Post Office Inspector, San Francisco, California; Representative John R. Murdock; Regional Forester F. C. W. Pooler; Mr. William Bourdan, President Northern Arizona Cattle Growers Association; Hon. Ambrose O'Connell, Executive Assistant to The Postmaster General; Mr. Columbus Giragi, Editor, Holbrook Tribune; Mr. Howard S. Reed, State Highway Engineer for Arizona; Mayor W. A. Sullivan, Globe, Arizona.

The addresses completed, the group journeyed to Water Canyon, three miles south through Eagar, Ariz., for a Cowboy Barbecue. A special motorlog had been prepared for the afternoon tour of White Mountain Alpine scenery, while a Dedication Ball climaxed the occasion at the High School auditorium.

With that well known Apache hospitality, guests were welcomed to inspect the new Federal Building.

### HEADSTONE ERECTED OVER PIONEER'S GRAVE

The headstone constructed by the CCC for the grave of Leonard R. Reed, first settler in the Cave Creek Area, now on the old Chiricahua section of the Coronado N. F., was formally dedicated on June 26. There were about 75 persons present at the ceremony, over twenty of them direct descendants of Mr. Reed.

Ranger Gilbert Sykes gave a short address explaining that the Forest Service erects headstones on the graves of pioneers buried on the National Forests as a comprehensive program of preserving such graves, ancient landmarks, etc., and partly as a gesture to the pioneers buried who first developed the West.

Mr. C. T. McGlone, first Supervisor of the old Chiricahua N. F., made the principal address, relating several incidents of the early settlement days in Cave Creek.

All the grandchildren and great grandchildren placed pine boughs on the grave after the headstone had been officially unveiled by Miss Doris Lee, the oldest of the great, great, grandchildren.

Supervisor Fred Winn believes that Reed settled in Cave Creek around 1872.

### FROM THE CARSON PINE CONE OF JULY 7, 1917

Ranger Ancona returned to Taos July 5 from Questa. He came via Gold Hill, Wheeler Peak and the Old Mike Lockout. He reported considerable difficulty in getting through the snow between Old Mike Lockout and Wheeler Peak.

#### MEMORIAL FOR TED SWIFT DEDICATED

The Rotary Club of Safford dedicated a memorial, Sept. 15 to former Supervisor Ted T. Swift now living in Phoenix. A bronze, rectangle, 14 x 20 inches plaque was fastened to the rock in Wet Canyon with four Star lead anchor bolts, the ends of which do not show in the plaque. The following is inscribed lengthwise in letters one-half inch in height:

"IN HONOR

TO

TED T. SWIFT

Who made his vision of a scenic highway over the Graham and a Recreational Area at Turkey Flat come true through his untiring service and forethought for the community, and through his leadership and work that made this possible.

Erected by the Safford Rotary Club of which

Ted T. Swift was a charter member."

Ted entered the Forest Service, January 1, 1907. He was Supervisor of the Crook from January 1, 1908, until March 1, 1923, when he was transferred to the Tonto N. F. as Supervisor, which position he just as capably filled until retiring on January 31, 1935. His many friends will be glad to learn that the citizens of Safford fully appreciate Ted's vision, activity, and leadership in the years gone by.

#### CARSON PINE CONE REVIVED

The Carson Pine Cone has been revived again. An introductory note states "that there will be no regular time for publication of this bulletin, for it will appear every now and then as the spirit moves."

Congratulations are extended to the Carson! Members of the Regional Office will be looking forward with interest to reading future issues of the Pine Cone.

#### CORONADO HONORS LONG SERVICE

"To A. T. Johnson: From his friends in and out of the U. S. Forest Service. A gift in honor of his twentieth consecutive birthday spent as a lookout on top of the Chiricahua Mountains and in recognition of faithful and conscientious service.' The above was signed by 23 men and women. The gift was presented to Mr. Johnson at Rustler Park Ranger Station on June 30, 1938 where those of his friends who were able to get off, honored him with a chicken dinner and a birthday cake. The gift was a green leather belt with a monogrammed buckle and the letter with the 23 signatures was framed. During these 20 years, Mr. Johnson has served under Supervisors Selkirk, Pitchlynn, Johnston, Wales, Calkins, Winn; and Rangers Schoenberg, Sage, Scholefield, Harris, Knipe, Ruth, Ashurst, Sowell, Bentley, McDuffy, Garner, Abbott and Sykes." (Coronado Bulletin)

#### THE HENRY L. TAYLORS DIE IN TRAGEDY

Quick and tragic death came to Henry L. Taylor, retired veteran of Region 3 and to his wife when their automobile was struck by a streamlined train June 24 near San Diego, Calif.

Taylor was a Forest Ranger at Globe, on the Crook N. F. when he retired in 1932. He was one of the oldest members in the Region from point of service, with a record of 24 years. This was entirely on the Crook.

Mr. and Mrs. Taylor were equally well liked. She was a pioneer teacher in Arizona, and retired from teaching about the time Mr. Taylor retired from the Forest Service. Their fine hospitality is well remembered by Service travelers. Following retirement, they moved to California, where most of their time was spent around San Diego.



# FISCAL CONTROL

## NATIONAL FOREST RECEIPTS TOTAL \$541,071

Indicative of local and National demand for raw material produced by the thirteen National Forests of Arizona and New Mexico for the fiscal year ended June 30, 1938, regional reports of the Forest Service show a net amount of \$541,071, which is \$80,421 in excess of the receipts for the previous year, due mainly to an increased demand for timber.

Income from the sale of mature timber was \$226,403, and from grazing of domestic livestock \$280,531, which are the principal sources of revenue. Fees paid for special-use privileges, such as rentals for summer-home sites, resorts, enclosed pastures, and miscellaneous facilities, totaled \$27,539. Water-power and transmission-line rentals added \$6,579 more, but for such privileges as conduits, dams, reservoirs, pumping stations or any water development project for municipal, domestic, irrigation, mining, railroad, stock watering, or other purpose of public value, no charge is made and no income derived.

The Coconino National Forest with receipts totaling \$76,486; the Sitgreaves, \$70,184; the Apache, \$57,138; and the Kaibab, \$50,411, are the largest producers of income from forest products in the region, due largely to timber sales and grazing privileges. These Forests are located in the immense timber belt in northern and eastern Arizona. The Forests in New Mexico produced receipts totaling \$201,749, and those of Arizona, \$339,322.

For the past thirty years, and continuing now, 25% of the income from National Forest receipts has been returned to the Counties in which the forest lands are located for the benefit of their public schools and roads, which fund is expended by the Counties. In addition, 10% of the receipts are expended by the Government in the construction and maintenance of roads and trails located within the National Forests. Under the Enabling Acts that admitted Arizona and New Mexico into the Union as States additional sums are given the two States from the Forest receipts for the Common School funds. Thus more than 35% of the receipts are expended for the direct benefit of the two States.

## PURCHASE OF DRINKING H2O

Because of negative decisions, it has been and is difficult to purchase bottled and other drinking water from public funds. The following decision, 17 ACG 698 continues the hazard:

"A contract for the furnishing of bottled drinking water for the use of officers and employees is not authorized where the public water supply of the locality is safe for drinking purposes, notwithstanding the public water is reported to be very hard, unpalatable, etc."

## AN APPROPRIATE LEAD

A contributor to Case and Comment writes to the Editor, "I note in this morning's Detroit Legal News that Bills for Divorce are located in a new but very 'appropriate' column in the newspaper. This morning's list was under the heading 'Discontinuance of Assumed Names.'"



## MY TRIP

"Come Friday, a week ago, after leaving the office I took a short drive into the hills with my daughter. Becoming involved in the traffic at Moriarty I mistook the road and found myself betimes at Tucumcari. Bedtime having arrived we weighed anchor for the night. Setting out early next morning we expected to get home in time for me to catch up with some rush work before Saturday noon. But presto we found ourselves in Amarillo, and for lack of accurate directions presently reached Oklahoma City. Taking the "belt line" there we became hopelessly lost and could get oriented only by setting out straight for St. Louis. St. Louis proved tougher yet and before we knew it we were in the environs of Chicago. Getting on one of the through boulevards there they wouldn't let us turn until we got away up in Michigan. Returning we took another road and with corrigan luck got home (the following) Saturday afternoon." -- E.S.F.

Many reactions have been received concerning the "wrong way" trip of E. S. French, Regional Law Officer, some hinting at downright disbelief in his story of the trip.

"My Trip" in the Bulletin of Aug. 5, 1938, didn't bring out whether the 'Voyage' was made in a 'crate', Regional Fiscal Agent Albert Morris opined. "However, since the 'deponeth sayeth not' we shall have to draw our own conclusions."

Administrative Officer E. P. Ancona penned the following memo: "Avast you land lubber! When the Captain orders the anchor weighed it means pull up the old mud hook and set sail for other parts. You were apparently hopelessly adrift the night in Tucumcari -- running lights not set, all watches below decks, sails unfurled and the mizzen topsail, halyards all fouled. Shades of Davey Jones."

## AND HE DID

"Don't you think," airily suggested the new Washington inspector, "that you ought to brush up a bit on your correspondence? Use big words, they lend dignity to your letters."

"Perhaps you're right," admitted the ranger, calmly studying the end of his cigar, "but, while eschewing mediocrity of expression through platitudinous phraseology, it behooves one to beware of ponderosity, and to be mindful that pedantry, being indicatory of an inherent megalomania, frustrates its own aim and results merely in obnubilation." Northern Region News.

## WHERE IT CAME FROM

In response to a request from a New York law firm, a New Orleans attorney rendered an opinion on the title to a tract of land in Louisiana. Back came a letter from New York saying that the opinion was O. K. as far as it went, but that title to the property prior to 1803 had not been covered satisfactorily. And here is what the New Orleans lawyer wrote:

"Please be advised that in 1803 the United States of America acquired the Territory of Louisiana from the Republic of France by purchase. The Republic of France in turn had acquired title from the Spanish Crown by conquest, the Spanish Crown originally having had its title by virtue of the discoveries of one Christopher Columbua, a Gencese sailor who had been duly authorized to embark upon his voyage of discovery by Isabella, Queen of Spain. Isabella, before granting such authority, had obtained the sanction of His Holiness, the Pope; the Pope is the Vicar on earth of Jesus Christ; Jesus Christ is the son and Heir Apparent of God; God made Louisiana."

(Case and Comment).









